

# Subject Index to Volume 16

## A

- Acetylcholine**  
cardiovascular reflexes, stomach, H459  
circus-movement tachycardia, atrium (frog), H185  
endothelium and asymmetrical responses, coronary arterial wall, H403
- Acidosis**  
early contractile dysfunction and, ischemic heart, H760  
endocardial response, Purkinje-muscle coupling and, H303  
ischemia and, heart ventricle, H916
- Acylcarnitine**, fatty, oxygen-deficient heart, H25
- Adenine nucleotides**, stores, ischemic heart, H380
- Adenine nucleotide translocase**, protective role of, oxygen-deficient heart, H25
- Adenosine**  
coronary blood flow and, H869  
hypoxic pulmonary vasodilation and (ferret), H541  
myocardial, dipyridamole effects, H804  
nucleoside release,  $\beta$ -blockade effects, heart, H330  
receptor agonists, renal effects, H343
- Adenosine deaminase**, contraction-induced vasodilation and, arterioles, H195
- Adenosine diphosphate**, endothelium and asymmetrical responses, coronary arterial wall, H403
- Adenosine triphosphatase**, myosin, reversible contractile dysfunction in hypertrophy, H146
- Adenosine triphosphate**  
ischemic heart, H380  
metabolic inhibition, myocardial, H322  
nutritional modification, cardiac, weanling, H967
- Adenosylmethionine decarboxylase**, pulmonary hypertension and, H682
- Adrenalectomy**  
blood pressure, sodium transport and, H902  
sodium-potassium-ATPase activity, myocardium, H570
- Adrenal gland**, demedullation, spontaneous hypertension response to, H109
- Adrenergic-cholinergic interaction**, membrane potential, potassium-depolarized ventricular muscle, H244
- Adrenoceptors: see Receptors**
- Adventitia**, norepinephrine effects, aortic baroreceptors, H811
- Afterpotentials**, depolarizing, heart cells, calcium effects, embryo (chick), H273
- Albumin**  
circulating proteins, lung endothelial permeability and, H206  
protein absorption and, red blood cell surface, H748  
protein concentration, lymph and interstitial fluid, tail, H74  
red blood cell deformability and, H739
- Allometric relations**, body size, H495
- Amino acids**, vasodilation and, renal, H999
- Amphiphilic compounds**, inhibition, myocardial cytochrome c, H889
- Anesthesia**, central prostaglandin  $E_2$  effects, awake state, H218
- Angiotensin**  
central action, renal hypertension, awake state, H349  
pressor action, vasopressin effects, H973
- Angiotensin antagonist**, biphasic bipolar response, H88
- Angiotensin II**  
biphasic arteriolar response to, H88  
hypertension, awake state, H218  
microinjection, locus coeruleus, awake state, H675  
pressor responsiveness to, pregnancy, H100
- Antiarrhythmic drugs**, calcium paradox, heart, H874
- Antidiuretic hormone: see also Vasopressin**  
baroreflex control of, H638
- Antipyrine**, cerebrovascular transport, brain perfusion technique, H484
- Aorta**  
adrenoceptor numbers, vascular, H928  
hemodynamics, third-generation Doppler system, H847
- Arachidonic acid**, coronary blood flow and, treadmill exercise, H452
- AR-L57**, contractility and protein phosphorylation, cardiomyocytes, H157
- Arrhythmias**  
cardiac mapping, simultaneous, H661  
unidirectional block, Purkinje fibers and ventricular layers of papillary muscles, H584
- Arterial wall**, thoracic aorta, filtration, H784
- Arteriolar wall**, constricted, morphology of, H687
- Arterioles**  
biphasic response, angiotensin II, H88  
cerebral  
hemorrhage and hypercapnia, H40  
15-hydroperoxy-eicosatetraenoic acid effects, H631  
contraction-induced vasodilation, reduction by adenosine deaminase or theophylline (hamster), H195
- Ascorbate**, electrical stimulation, free radicals, H709
- Atenolol**, nucleoside release,  $\beta$ -blockade effects, heart, H330
- ATPase: see Adenosine triphosphatase; Sodium-potassium-ATPase**
- ATP: see Adenosine triphosphate**
- Atria: see Heart atria**
- Atrioventricular node**, spontaneous activity, adrenergic potentiation of, H415
- Autoimmunity**, spontaneous hypertension, H722
- Automaticity**  
adrenergic potentiation, paranodal fibers, H415  
ventricular fibers, low concentration of barium, H429
- Autonomic nervous system**  
dysfunction, insulin treatment and, juvenile alloxan-induced diabetes, H132

- rhythmic variations, R-R interval, sleep and wakefulness, H67
- Autonomic regulation**, subsidiary pacemaker, cardiac denervation effects, H523
- Autoregulation**  
cerebral vasoconstrictor responses, nimodipine and, H170  
metabolic, coronary vasodilation, adenosine effects, H869
- Awake state**  
cerebral blood flow, during hypoxia, H446  
heart rate measurement, H1010  
intracarotid prostaglandin  $E_2$  effects, H218  
ischemia, regional myocardial perfusion and wall thickening, H727  
renal hypertension, central action of angiotensin, H349  
R-R interval, rhythmic variations in, H67  
vasopressin microinjection, vasopressin, H675  
ventricular force-interval relations, load sensitivity of, H616

## B

- Barium**  
exchange, ischemia effects, myocardium, H177  
low concentrations, automaticity of ventricular fibers, H429
- Barium ion**, contracture, isotonic length transient, heart muscle, H548
- Baroreceptor: see Receptors**
- Bay K 8644**, cardiac slow action potentials and, H337
- Bethanechol**, cardiovascular reflexes, stomach, H459
- Bile**, blood flow and oxygen uptake and, jejunum, H395
- Blockade**  
 $\beta$ -, regional myocardial flow and function and, exercise, H52  
 $\beta$ -adrenergic, nucleoside release, heart, H330  
autonomic, neurogenic hypertension, H991
- Blood-brain barrier**, cerebrovascular transport, brain perfusion technique, H484
- Blood flow: see also Circulation; Microcirculation**  
cerebral  
brain perfusion technique, H484  
pial vessel caliber and, hemorrhage and hypercapnia, H40  
sympathetic nerves, during hypoxia, awake state, H446  
changes, Doppler flow probes, H1005
- coronary**  
adenosine effects, H869  
indomethacin effects, treadmill exercise, H452  
microsphere injection site and hemodynamics, H35
- cutaneous**  
reduction induced by smoking, vasopressin and, H895

- Blood flow (*continued*)  
 tail, H80  
 exchange transfusion effects, fetal-maternal (sheep), H655  
 jejunal, time course, during nutrient absorption, H395  
 myocardial  
 accumulation of nonesterified fatty acids, H264  
 $\beta$ -blockade effects, exercise, H52  
 regulation, adenosine and theophylline, heart muscle, H195  
 splanchnic, hypoxia and, exercise, H251  
 transmural, systolic wall thickening and, ischemia, awake state, H727  
 Blood pressure: *see also* Pressure  
 arterial  
 chronic tobacco smoke exposure effects, H556  
 regulation, vasopressin microinjection and, awake state, H675  
 central action of angiotensin, renal hypertension, H349  
 cigarette smoking, vasopressin and, H895  
 sodium transport and, adrenalectomy, H902  
 training and, spontaneous hypertension, H109  
 Blood vessels  
 adrenoceptor numbers, aorta, H928  
 size, training effects, spontaneous hypertension, H109  
 Body, size, consequences of, H495  
 Bradykinin, cardiovascular reflexes and, stomach, H459  
 Brain, perfusion technique, cerebrovascular transport, H484  
 Bypass: *see* Shunt

## C

- Calcium  
 binding, phospholipase D, cardiac contractility and, H880  
 exchange, ischemia effects, myocardium, H177  
 membrane potentials and, cultured heart cells, embryo (chick), H273  
 paradox, heart, H874  
 sarcoplasmic reticular transport, ischemic heart, H380  
 sensitivity, cardiac, nutritional modification of contractile protein, weanling, H967  
 transport, cardiac, physical training effects, H909  
 Calcium antagonists  
 cardiac slow action potentials and, H337  
 myocardial binding and, H755  
 Calcium channels  
 intracellular sodium ions and, heart, H874  
 slow, calcium ion agonists and, H337  
 Calcium-free solution, contractions, coronary artery, H259  
 Calcium ion agonist, cardiac action potentials and, H337  
 Capacitance  
 intracranial hypertension, H715  
 intramyocardial, venous outflow, H984  
 Capacity, vascular, intracranial hypertension, H715  
 Capillaries, cerebrovascular transport, brain perfusion technique, H484  
 Capsaicin, cardiovascular reflexes, stomach, H459  
 Captopril  
 converting-enzyme inhibitor, renal nerves in renovascular hypertension, H61  
 hypertension after administration, H946  
 Carbohydrates, metabolism, ischemic myocardium, H264  
 Cardiac cells: *see* Heart cells  
 Cardiac mapping, simultaneous transmural, H661  
 Cardiac myocytes: *see also* Heart cells  
 contractility and protein phosphorylation, isoproterenol and AR-L57 effects, H157  
 cytochrome c inhibition, amphiphilic compounds, H889  
 Cardiomyopathy, diabetic, insulin dosage effects, H817  
 Carotid arteries, elastase, collagenase, and biaxial elastic properties, H124  
 Carotid sinus  
 baroreceptor function, repetitive ramped neck suction, H1013  
 baroreceptors: *see* Receptors  
 chronic tobacco smoke exposure, arterial blood pressure regulation, H556  
 Catecholamines  
 adrenal, third ventricle (AV3V) region, H139  
 afferent renal nerve stimulation and, H576  
 aortic baroreceptors and, adventitia, H811  
 hypoxia, exercise and, H251  
 neurohormones, intraventricular hypertonic sodium chloride and, H422  
 plasma, during hypoxemia and hypercapnia, H341  
 Cells: *see also* specific type  
 swelling, coronary resistance, and, diminished coronary perfusion, H467  
 Central gray, vasomotor projections, from third ventricle (AV3V) region, H139  
 Central nervous system  
 angiotensin action, renal hypertension, awake state, H349  
 arterial pressure control, vasopressin microinjection, locus coeruleus, awake state, H675  
 hypoxia, carotid baroreflex effectiveness during, H623  
 neurohormones, sodium chloride and, H422  
 Cerebral ventricles, AV3V region, vasomotor projections from, H139  
 Cerebrospinal fluid, sodium, neurohormones and, H422  
 Cesium, cardiac automaticity and, H429  
 Cigarette smoking, cutaneous blood flow and, vasopressin effects, H895  
 Circulation: *see also* Blood flow; Microcirculation  
 interstitial fluid pressure and, tail, H80  
 pulmonary, intracranial hypertension, H715  
 systemic, intracranial hypertension, H715  
 Coenzyme A, long-chain acyl, cytochrome c activity and, myocytes, H889  
 Collagenase, carotid artery, H124  
 Compliance  
 interstitial, tail, H80  
 vascular, intracranial hypertension, H715

- Contractility, cardiac: *see* Muscle, heart  
 Coronary artery  
 contractions, calcium-free solution, H259  
 free radicals, electrical stimulation, H709  
 reactivity, deoxycorticosterone acetate hypertension, H409  
 venous outflow, H984  
 wall, endothelium and asymmetrical responses, H403  
 Coronary occlusion  
 ischemia, awake state, H727  
 partial, diminished coronary perfusion, H467  
 Coronary stenosis: *see* Stenosis  
 Corticosterone, sodium-potassium-ATPase activity and, myocardial, H570  
 Coupling, Purkinje-muscle, hyperkalemia, hypoxia, and acidosis, H303  
 Creatine kinase, nutritional modification, cardiac, weanling, H967  
 Cremaster muscle, contraction-induced vasodilation, theophylline and adenosine deaminase effects, H195  
 Cyclophosphamide, spontaneous hypertension, H722  
 Cytochrome c, myocardial rotenone-insensitive NADH, inhibition by amphiphilic compounds, H889

## D

- Deoxycorticosterone acetate  
 hypertension, coronary artery reactivity, H409  
 spontaneous hypertension, chronic immunosuppression and, H722  
 3-Deoxy-3-fluoro-D-glucose, glucose transport analogue, heart, H754  
 Depolarization, membrane, hydrogen-induced, cardiac Purkinje fibers, H312  
 Development: *see also* Maturation  
 changes, cardiac contractility, fetal and postnatal (sheep), H371  
 Diabetes  
 cardiomyopathy, insulin dosage effects, H817  
 reduced transcoronary exchange and prostaglandin synthesis, heart, H563  
 Diabetes mellitus, juvenile alloxan-induced, vascular dysfunction, insulin treatment and, H132  
 $\alpha$ -Difluoromethylornithine, pulmonary hypertension and, H682  
 Dihydropyridines, cardiac slow action potentials and, H337  
 Diltiazem, ischemic heart, H380  
 Dimethyl sulfoxide, electrical stimulation, free radicals, H709  
 Dipyrindamole, myocardial adenosine, active hyperemia and, H804  
 Diuresis  
 afferent renal nerve stimulation and, H576  
 volume expansion effects, renal nerve (monkey), H960  
 DOCA: *see* Deoxycorticosterone acetate  
 Doppler flow probes, blood flow changes, H1005  
 Doppler velocity system, aortic flow, H847  
 Ductus venosus, autonomic mechanisms in (lamb), H17  
 Dye, voltage-sensitive, circus-movement tachycardia, atrium (frog), H185  
 Dye-dilution method, evaluation of right-to-left shunt, H517

## E

- Elastase, carotid artery, H124  
 Electrical stimulation, free radicals, H709  
 Electrocardiogram, awake state, noninstrumented small mammals, H1010  
 Electrophysiology  
   cardiac cells (chick), H669  
   cellular, hydrogen-induced membrane depolarization, H312  
   intraoperative mapping, cardiac, H661  
 Embryo  
   biphasic rectangular waves, postshock dysfunction (chick), H792  
   cultured heart cells, membrane potential, calcium effects (chick), H273  
 Endothelium, asymmetrical responses and, coronary arterial wall, H403  
 Enzymes: *see also* specific enzyme  
   sarcolemmal, hypoxia, ischemia, and reperfusion, H237  
 Epinephrine  
   hypoxia, exercise and, H251  
   paranodal fibers and, H415  
   plasma, cigarette smoking effects, H895  
 Erythrocytes  
   deformability, protein absorption and, cell surface, H739  
   surface, protein absorption, sodium ion and potassium ion effects, H748  
   velocity, omentum, H361  
 Estrogen, response, blood flow changes, Doppler flow probe, H1005  
 Exercise  
   hypoxia, splanchnic blood flow and, H251  
   physical training, myofibrillar and sarco-tubular activity coordination, H909  
   swimming, myofibrillar and sarco-tubular activity coordination, H909  
   training, spontaneous hypertension response to, H109  
 treadmill  
    $\beta$ -blockade effects, regional myocardial flow and function, H52  
   indomethacin effects on coronary blood flow, H452

## F

- Fatty acids  
   metabolism, mechanical function and, ischemic heart (swine), H387  
   nonesterified, accumulation, ischemic myocardium, H264  
 Feeding  
   low salt diet, cardiopulmonary baroreflexes, Dahl salt sensitivity, H119  
   nutrient absorption, time course of jejunal blood flow and oxygen uptake, H395  
   nutritional modification, heart contractile protein, weanling, H967  
 Femoral artery  
   contractions, calcium-free solution, H259  
   pulse reflection, directional disparity, H95  
 Fetus: *see also* Pregnancy  
   developmental changes, cardiac contractility (sheep), H371  
   maternal exchange transfusion, effects on oxygenation and blood flow (sheep), H655  
 Filtration, thoracic aorta and, H784  
 Flow  
   aortic, third-generation Doppler system, H847

- measurement, Doppler, third ventricle (AV3V) region, H139  
 Flowmeter, Doppler, directional pulsed, H1005  
 Fluid  
   filtration, thoracic aorta, H784  
   interstitial, protein concentration, tail, H74  
   lymph, protein concentration, tail, H74  
 Fluorescence, surface, diabetic heart, H563  
 Fluorometry, epicardial, mitochondrial membrane potential, heart, H508  
 Force-interval relations  
   developmental changes, fetal and postnatal (sheep), H371  
   ventricular, load sensitivity of, awake state, H616  
 Force-velocity relations, diabetic cardiomyopathy, H817

## G

- Glucose, absorption, time course of blood flow and oxygen uptake, jejunal, H395  
 Glucose transport analogue, 3-deoxy-3-fluoro-D-glucose, heart, H754  
 Glutathione, electrical stimulation, free radicals, H709  
 Glycocalyx, lung endothelial, serum protein interaction with, H206  
 Glycogen phosphorylase, cardiomyocytes, isoproterenol and AR-L57 effects, H157  
 Glycolysis, metabolic inhibition, myocardial, H322

## H

- Heart  
   adenosine effects, coronary vasodilation, H869  
   automaticity, low concentration of barium and, H429  
   contractile dysfunction, ischemia, acidosis and, H760  
   contractility, phospholipase D and calcium binding, H880  
   defibrillation, postshock dysfunction (chick), H792  
   denervation, subsidiary atrial pacemaker stabilization, H523  
   diabetic, reduced transcortical exchange and prostaglandin synthesis, H563  
   dimension transducer, H857  
   failure, reversible contractile dysfunction, hypertrophy, H146  
   glucose transport analogue, H754  
   hypertrophied, ventricular function and muscle mechanics, H699  
   hypoperfused, nucleoside release,  $\beta$ -blockade effects, H330  
   ischemic  
     fatty acid metabolism and (swine), H387  
     metabolic changes, H380  
     membrane depolarization, hydrogen-induced, H312  
     microvascular permeability, histamine effects, H1  
     mitochondria, membrane potential, monitoring, H508  
   myofibrillar and sarco-tubular activity, swimming effects, H909  
   oxygen-deficient, adenine nucleotide translocase and, H25  
   potassium-depolarized, adrenergic-cho-linergic interactions, H244  
   sarcolemmal sodium-potassium-ATPase, palmitoyl carnitine and lysophosphatidylcholine effects, H840  
   tissue, coupled layers, H596  
   work, dipyrindamole effects, H804  
 Heart atria  
   circus-movement tachycardia (frog), H185  
   pacemaker stabilization, cardiac denervation effects, H523  
 Heart cells: *see also* Cardiac myocytes  
   contractility and protein phosphorylation, isoproterenol and AR-L57 effects, H157  
   culture, array of microelectrodes (chick), H669  
   electrically coupled, propagation through, H596  
   membrane potential, calcium effects, embryo (chick), H273  
   metabolic inhibition, H322  
 Heart rate  
   baroreceptor function, quantitative test, H1013  
   cigarette smoking, vasopressin and, H895  
   hypoxia, baroreflex effectiveness during, H623  
   measurement, awake state, H1010  
   R-R interval, rhythmic variations in sleep and wakefulness, H67  
 Heart ventricles  
   automaticity, low concentration of barium and, H429  
   ischemia, extracellular pH and tension during, H916  
   layers, Purkinje fibers and, unidirectional block between, H584  
   maximum upstroke velocity, slow inactivation of (guinea pig), H645  
   pressure-flow relations: *see* Pressure-flow relations  
 Heart ventricles, left  
   contraction, load impedance and, H531  
   function, muscle mechanics and, hypertrophied heart, H699  
   load and inotropy effects, H978  
   microvascular permeability, histamine effects, H1  
   oxygen reserve, H861  
   wall, heat transport in, H295  
 Heart ventricles, right  
   hypertrophy, polyamines and, H682  
   reversible contractile dysfunction, hypertrophy, H146  
 Heat, transport, left ventricular wall, H295  
 Hemodialysis, hemodynamic response, uremia, H229  
 Hemodynamics, microsphere injection site and, coronary blood flow, H35  
 Hemoglobin-oxygen affinity, exchange transfusion effects, fetal-maternal (sheep), H655  
 Hemorrhage, pial vessel caliber, cerebral blood flow and, H40  
 Histamine, microvascular permeability, coronary, H1  
 Hormonal regulation, sodium-potassium-ATPase activity, myocardium, H570  
 Hydrogen peroxide, cerebral microcirculation and, H631  
 15-Hydroperoxy-eicosatetraenoic acid, cerebral arterioles and, H631

5-Hydroxytryptamine, endothelium and asymmetrical responses, coronary arterial wall, H403

**Hypercapnia**  
pial vessel caliber, cerebral blood flow and, H40  
plasma catecholamines during, H341

**Hyperemia**  
active, dipyrindamole effects, H804  
intestinal, postprandial, nutrient absorption and, jejunal, H395

**Hyperkalemia, endocardial response, Purkinje-muscle coupling and, H303**

**Hyperperfusion, renal, protein-induced, H999**

**Hypertension**  
after captopril administration, H946  
blood pressure and sodium transport, adrenalectomy effects, H902  
cardiovascular response, neurohormonal characteristics of, H422  
central prostaglandin E<sub>2</sub>, awake state, H218  
deoxycorticosterone acetate, coronary artery reactivity, H409  
genetic, cardiopulmonary baroreflexes and, low salt diet, H119  
intracranial, hemodynamics, H715  
neurogenic, mechanisms of, H991  
pulmonary  
hemodynamics, H715  
monocrotaline-induced, polyamines and, H682  
renal, central action of angiotensin, awake state, H349  
renovascular, renal nerves in, H61  
spontaneous  
chemical sympathectomy, adrenal demedullation, and training effects, H109  
chronic immunosuppression and, H722

**Hypertrophy, without contractile dysfunction, reversal of pressor overload and, H146**

**Hypocapnia, nimodipine, cerebral vasoconstrictor responses, H170**

**Hypokinesia, pressure-length relations, end-systolic, H768**

**Hypotension**  
hemorrhagic  
microvascular resistance during, omentum, H361  
pial vessel caliber and cerebral blood flow, H40  
sympathetic nerves and, awake state, H446

**Hypoxemia**  
blood flow and, splanchnic, exercise, H251  
oxygen reserve, left ventricle, H861  
plasma catecholamines during, H341

**Hypoxia**  
arterial, carotid baroreflex during, H623  
cerebral blood flow, sympathetic nerves and, awake state, H446  
contractile dysfunction during ischemia and, heart, H760  
endocardial response, Purkinje-muscle coupling and, H303  
ischemia and reperfusion, sarcolemmal enzymes and, H237  
pulmonary vasodilation, adenosine and (ferret), H541

splanchnic blood flow and, exercise, H251  
tissue, oxygen reserve, left ventricle, H861

## I

**Immunoglobulin G**  
circulating proteins, lung endothelial permeability and, H206  
protein concentration, lymph and interstitial fluid, tail, H74

**Immunosuppression, chronic, hypertension and, H722**

**Impedance, arterial input, ventricular pressure-flow relations and, H978**

**Indomethacin**  
autonomic mechanisms, ductus venosus (lamb), H17  
coronary blood flow and, graded treadmill exercise, H452

**Infant: see Neonate**

**Infarction, myocardial, experimental, ultrasonic backscatter, H478**

**Innervation, adrenergic, ductus venosus (lamb), H17**

**Inosine, nucleoside release,  $\beta$ -blockade effects, heart, H330**

**Insulin**  
dosage effects, diabetic cardiomyopathy, H817  
vascular dysfunction and, juvenile alloxan diabetes mellitus, H132

**Ischemia**  
cardiac, metabolic changes in, H380  
contractile dysfunction and, acidosis effects, H760  
hypoxia and reperfusion, sarcolemmal enzymes and, H237  
myocardial  
accumulation of nonesterified fatty acids, H264  
calcium exchange and, H177  
exercise-induced,  $\beta$ -blockade effects, H52  
extracellular pH and tension during, heart ventricle, H916  
ultrasonic backscatter before and after, H478  
wall thickening, awake state, H727  
nucleoside release,  $\beta$ -adrenergic blockade effects, heart, H330

**Isomyosin, nutritional modification, cardiac, weanling, H967**

**Isoproterenol**  
contractility and protein phosphorylation, cardiomyocytes, H157  
pressure-length relations, end-systolic, H768

**Isovolumic pressure: see Pressure**

**Isozymes, myosin, reversible contractile dysfunction in hypertrophy, H146**

## J

**Jejunum, blood flow and oxygen uptake, during nutrient absorption, H395**

## K

**Kidney**  
function, adenosine effects, H343  
hemodynamics, afferent renal nerve stimulation effects, H576  
hypertension, sodium effects, H797  
vasodilation, amino acid-induced, H999

## L

**Lidocaine, pressure-length relations, end-systolic, H768**

**Ligand binding site, adenine nucleotide translocase, oxygen-deficient heart, H25**

**Lipids, solubility, brain perfusion technique, H484**

**Liver, function, hypoxia and exercise, H251**

**Load**  
impedance, ventricular contraction and, H531  
sensitivity, ventricular force-interval relations, awake state, H616

**Locus coeruleus, vasopressin microinjection, awake state, H675**

**Lung**  
circulation: *see* Circulation  
endothelium, circulating proteins and, H206  
hypoxic vasodilation, adenosine and (ferret), H541

**Lymphatics, mesenteric, sympathetic effects on spontaneous activity (cat), H610**

**Lymphocytes, count, chronic immunosuppression, hypertension, H722**

**Lymph vessel, pumping activity, sympathetic effects (cattle), H610**

**Lysophosphatidylcholine, cardiac sarcolemmal sodium-potassium-ATPase and, H840**

## M

**Maturation: *see also* Development**  
R-R interval, rhythmic variations, sleep and wakefulness, H67

**Maximum upstroke velocity, slow inactivation of, ventricular myocardium (guinea pig), H645**

**Metabolic rate, body size and, H495**

**Microcirculation: *see also* Blood flow; Circulation**  
cerebral, 15-hydroperoxy-eicosatetraenoic acid effects, H631  
contraction-induced arteriolar vasodilation, adenosine and theophylline effects, heart muscle, H195

**Microelectrodes**  
array, cardiac cells (chick), H669  
ion-sensitive, calcium paradox, heart, H874

**Microhematocrit, hemorrhagic hypotension, omentum, H361**

**Micropressures, hemorrhagic hypotension, omentum, H361**

**Microspheres**  
radiolabeled  
coronary blood flow, adenosine effects, H869  
injection site and hemodynamics, H35  
ischemia, awake state, H727

**Microvessels, arteriolar wall, H687**

**Models**  
cardiac mapping, simultaneous, H661  
exponential, isovolumic pressure fall, time constant of, H283

**Monocrotaline, pulmonary hypertension, polyamines and, H682**

**Muscle, heart**  
calcium ion agonists, action potentials and, H337

- contractility  
developmental changes, fetal and post-natal (sheep), H371  
histamine effects, H1  
pH effects, myocardial ischemia, H916  
protein phosphorylation and, cardiomyocytes, H157  
contraction, metabolic inhibition and, H322  
contraction pattern, load impedance and, H531  
electrically coupled cells, propagation through, H596  
function studies, diabetic cardiomyopathy, H817  
hypertrophied, mechanics and ventricular function, H699  
isotonic length transient, barium ion-induced contracture, H548  
positive inotropy, phospholipase D, H880  
short-term memory, myocardial, H8
- ventricular  
adrenergic-cholinergic interaction, H244  
low concentration of barium and, H429  
maximum upstroke velocity (guinea pig), H645  
ventricular layers, Purkinje fibers and, unidirectional block between, H584
- Muscle, smooth  
constricted, arteriolar wall, H687  
tension, chemically induced reflexes, stomach, H459
- vascular  
adrenoceptor regional differences, H928  
blood pressure and sodium transport, adrenalectomy effects, H902  
contractions, calcium-free solution, H259  
reactivity, DOCA hypertension, H409
- Myocardial cells  
embryo, array of microelectrodes (chick), H669  
phospholipase D, calcium binding and, H880  
postshock dysfunction, biphasic rectangular waves (chick), H792
- Myocardiopathy, reduced endothelial diffusion, diabetic heart, H563
- Myocardium  
binding, nitrendipine effects, H775  
calcium exchange, ischemia effects, H177  
cell volume, coronary resistance and, diminished coronary perfusion, H467  
contractile function, hypertrophy, reversal of pressor overload and, H146  
contractility, ischemic reperfusion and metabolic changes, H380  
contraction, ultrasonic backscatter, before and after ischemia, H478  
flow-function relations, ischemia, awake state, H727  
heat production, H295  
infarction: *see* Infarction  
ischemic, accumulation of nonesterified fatty acids, H264  
mechanics, barium ion-induced contraction, H548  
metabolic inhibition, H322
- potassium-depolarized, adrenergic-cholinergic interactions, H244  
regional function, end-systolic pressure-length relations, H768  
regional perfusion, wall thickening and, ischemia, awake state, H727  
short-term memory, H8  
sodium-potassium-ATPase activity, corticosterone and triiodothyronine control of, H570  
ventricular, slow inactivation of (guinea pig), H645
- Myofibrils  
activity, swimming effects, H909  
heart contractile protein, nutritional modification of, weanling, H967
- ### N
- Natriuresis  
afferent renal nerve stimulation and, H576  
volume expansion effects, renal nerves (monkey), H960
- Neonate, developmental changes, cardiac contractility (sheep), H371
- Nephrectomy, pressor action, vasopressin effects, H973
- Nicotine, chronic tobacco smoke exposure effects, arterial blood pressure regulation, H556
- Nifedipine, myocardial binding and, H775
- Nimodipine, cerebral vasoconstrictor responses and, H170
- Nitrendipine, vascular responses, myocardial binding and, H775
- Norepinephrine  
adrenoceptor numbers, aorta, H928  
aortic baroreceptors and, adventitia, H811  
contractions and, coronary artery, calcium-free solution, H259  
DOCA hypertension and, coronary artery reactivity, H409  
electrical stimulation, free radicals, H709  
hypoxia, exercise and, H251  
microinjection, locus coeruleus, awake state, H675  
plasma, cigarette smoking effects, H895  
pressor action, vasopressin effects, H973  
renal cortical content, renovascular hypertension, H61
- Nucleosides, release,  $\beta$ -blockade effects, heart, H330
- Nutrients, absorption, time course of blood flow and oxygen uptake, jejunum, H395
- Nutrition: *see* Feeding
- ### O
- Omentum, hemorrhagic hypotension, microvascular resistance during, H361
- 3-O-Methylglucose, transport analogue, heart, H754
- Ornithine decarboxylase, pulmonary hypertension and, H682
- Ouabain, tetrodotoxin-resistance relaxation, saphenous vein, H952
- Oxfenicine, efficiency, ischemic heart (swine), H387
- Oxidation, fatty acid, mechanical function and, ischemic heart (swine), H387
- Oxidative metabolism, vasodilation, renal, amino acid-induced, H999
- Oxygen  
consumption  
myocardial, adenosine effects, H869  
myocardial, heat transport, H295  
coronary sinus, prostaglandin effects, treadmill exercise, H452  
deficiency, heart, adenine nucleotide translocase and, H25  
reserve, left ventricle, H861  
uptake and extraction, jejunal, time course, during nutrient absorption, H395
- Oxygenation, exchange transfusion effects, fetal-maternal (sheep), H655
- ### P
- Pacemaker, atrial, stabilization, cardiac denervation effects, H523
- Palmitate,  $^{14}\text{C}$ -labeled, ischemic heart (swine), H387
- Palmitoyl carnitine, cardiac sarcolemmal sodium-potassium-ATPase and, H840
- Papillary muscle: *see* Muscle, heart
- Parabrachial nucleus, vasopressin microinjections and, awake state, H675
- Paranodal fibers, spontaneous activity, adrenergic potentiation of, H415
- Parasympathetic influences, subsidiary atrial pacemaker stabilization, H523
- Peptides, pressor, vasopressin effects on, H973
- Permeability  
cerebrovascular, brain perfusion technique, H484  
endothelial, circulating proteins, lung, H206  
microvascular, histamine effects, H1
- pH  
extracellular, tension and, during ischemia, heart ventricle, H916  
low, membrane potential and, cardiac Purkinje fibers, H312  
measurements, contractile dysfunction during ischemia and, heart, H760
- Phase-plane method, evaluation of right-to-left shunt, H517
- Phenylephrine  
adrenoceptor numbers, aorta, H928  
baroreceptor function, repetitive ramped neck suction and, H1013  
chronic tobacco smoke exposure and, arterial blood pressure regulation, H556
- Phosphate, high-energy, content, ischemic myocardium, H264
- Phospholipase D, calcium, cardiac contractility and, H880
- Phospholipids, anionic, cardiac contractility and, H880
- Physical training: *see* Exercise
- Pial vessel, caliber, blood flow and, hemorrhage and hypercapnia, H40
- Piezoelectric crystal, blood flow changes, doppler flow probe, H1005
- Plasma, renin: *see* Renin
- Polyamines, pulmonary hypertension and, H682
- Postacetylcholine, rebound, adrenergic-cholinergic interaction, ventricular muscle, H244
- Postshock dysfunction, biphasic rectangular waves (chick), H792
- Posture, head-up tilting, chronic tobacco

**Potassium**  
 contractions and, coronary artery, calcium-free solution, H259  
 release, ischemic myocardium, H264  
 uptake, metabolic inhibition and, myocardial, H322

**Potassium chloride, DOCA hypertension and, coronary artery reactivity, H409**

**Potassium ions, protein absorption and, red blood cell surface, H748**

**Potentials**  
 action  
   cardiac, Bay K 8644 effects, H337  
   cycle length-dependent, Purkinje fibers, H936  
   optical recording of, tachycardia, atrium (frog), H185  
   paranodal fibers, H415  
   propagation, electrically coupled cells, H596  
 membrane  
   adrenergic-cholinergic interaction, myocardium, H244  
   calcium effects, cultured heart cells, embryo (chick), H273  
   low pH and, cardiac Purkinje fibers, H312  
   metabolic inhibition and, myocardial, H322  
   mitochondrial, monitoring, heart, H508  
   pacemaker, low concentration of barium and, H429

**Power-to-weight ratio, body size and, H495**

**Prazosin, adrenoceptor numbers, aorta, H928**

**Pregnancy: see also Fetus**  
   pressor response, angiotensin II, norepinephrine, and vasopressin, H100

**Pressor action, angiotensin and norepinephrine, vasopressin effects, H973**

**Pressor response, decreased, angiotensin II, norepinephrine, and vasopressin, pregnancy and, H100**

**Pressure: see also Blood pressure**  
   arterial, prostaglandin  $E_2$  effects, awake state, H218  
   colloid osmotic, protein concentration, tail, H74  
   interstitial fluid, hemodynamics and, tail, H80  
   intracranial, hemodynamics of, H715  
   isovolumic, fall, time constant, H283  
   overload  
     force-interval relations, heart ventricles, awake state, H616  
     hypertrophied heart, H699  
   stop-flow, coronary arterial, H984  
   systemic, carotid baroreflex effectiveness during hypoxia, H623  
   systolic and diastolic, oxygen reserve, heart, H861  
   transmural, filtration, thoracic aorta, H784

**Pressure-diameter relations, instantaneous, ventricular contraction and load impedance, H531**

**Pressure-flow relations**  
   adenosine, hypoxic pulmonary vasodilation and (ferret), H541  
   coronary artery, H984  
   ventricular, arterial input impedance effects, H978

**Pressure-length relations, end-systolic, changes in regional contractile state, H768**

**Pressure-volume relations, hypertrophied heart, H699**

**Propranolol, nucleoside release,  $\beta$ -blockade effects, heart, H330**

**Prostaglandin  $E_2$ , intracarotid, awake state, H218**

**Prostaglandin hydroperoxidase, cerebral microcirculation and, H631**

**Prostaglandins**  
   autonomic mechanisms, ductus venosus (lamb), H17  
   biphasic bipolar response, H88  
   contractions and, coronary artery, calcium-free solution, H259  
   coronary blood flow and, treadmill exercise, H452  
   pressor responsiveness to, pregnancy, H100  
   synthesis, reduced, diabetic heart, H563

**Protein**  
 absorption  
   red blood cell deformability and, H739  
   sodium ion and potassium ion effects, red blood cell surface, H748  
 cardiac contractile, nutritional modification of, weanling, H967  
 circulating, interaction with lung endothelium, H206  
 concentration, lymph and interstitial fluid, tail, H74  
 phosphorylation, cardiomyocytes, H157

**Protein kinase, cardiomyocytes, isoproterenol and AR-L57 effects, H157**

**Pulse reflection, directional disparity, H95**

**Pulse response, aortic, ventricular contraction and load impedance, H531**

**Pump**  
   sodium, metabolic inhibition, myocardial, H322  
   ventricular, function, arterial input impedance, H978

**Purkinje fibers**  
   automaticity, low concentration of barium and, H429  
   cardiac  
     cycle length-dependent action potential, H936  
     hydrogen-induced membrane depolarization, H312  
   unidirectional block, ventricular layers, papillary muscles, H584

**Purkinje-ventricular excitation, coupled layers, cardiac tissue, H596**

## R

**Radicals, free, electrical stimulation, H709**

**Radioligands, adrenoceptor numbers, aorta, H928**

**Ramped neck suction, repetitive, baroreceptor function test, H1013**

**Receptors**  
    $\beta$ -, potassium-depolarized myocardium, H244  
   adenosine, agonists, renal effects, H343  
    $\beta$ -adrenoceptor, lymphatic pumping activity, sympathetic effects (cattle), H610  
   adrenoceptors, differences in number, aorta, H928  
   angiotensin II, pregnancy, H100  
   baroreceptors  
     aortic, deafferentation, H991

aortic, norepinephrine effects, adventitia, H811

cardiac and arterial, control of plasma arginine vasopressin, H638

carotid sinus, acute resetting, H824, H833

function, quantitative test, H1013

Red blood cells: *see* Erythrocytes

Reflection coefficient, pulse, directional disparity, H95

**Reflexes**  
   baroreceptor, intraventricular hypertonic sodium chloride and, H422  
   baroreflexes  
     arteriolar, prostaglandin  $E_2$  effects, awake state, H218  
     cardiopulmonary, Dahl salt sensitivity, H119  
     carotid, arterial hypoxia and, H623  
     central action of angiotensin, renal hypertension, H349  
     control of plasma arginine vasopressin, H638  
     test, repetitive ramped neck suction, H1013  
   cardiovascular, chemically induced, stomach, H459

**Renal nerve**  
   afferent, stimulation effects, renal hemodynamics and excretory functions, H576  
   renovascular hypertension and, H61  
   sodium chloride, intraventricular hypertonic, H422  
   volume expansion effects (monkey), H960

**Renin**  
   plasma activity  
     cigarette smoking effects, H895  
     hypertension, awake state, H218  
     renovascular hypertension, H61  
   release, central action, renal hypertension, H349  
   secretion, adenosine effects, renal, H343

**Renin-angiotensin system**  
   cardiovascular response, intraventricular hypertonic sodium chloride, H422  
   renal hypertension, sodium effects, H797

**Resistance**  
   cerebrovascular, during hypoxia, awake state, H446  
   coronary, diminished coronary perfusion, H467  
   intracranial hypertension, H715  
   microvascular, hemorrhagic hypotension and, omentum, H361  
   pulmonary vascular, adenosine and (ferret), H541  
   regional vascular, central action of angiotensin, renal hypertension, H349  
   vascular, hemorrhage and hypercapnia, H40

**Respiration**  
   cellular, mitochondrial membrane potential, heart, H508  
   mitochondrial, amino acid-induced vasodilation, renal, H999

**R-R interval, oscillations in, sleep and wakefulness, H67**

**R waves, measurement, awake state, H1010**

## S

**Safranin, mitochondrial membrane potential and, heart, H508**

Saphenous vein  
 contractions, calcium-free solution, H259  
 tetrodotoxin relaxatory response, H952  
 Saralasin, central nervous system, renal hypertension, H349  
 Sarcolemma  
 cardiac, cycle length-dependent action potential, H936  
 hypoxia, ischemia, reperfusion and, H237  
 sodium-potassium-ATPase, palmitoyl carnitine and lysophosphatidylcholine effects, H840  
 Sarcoplasmic reticulum  
 activity, swimming effects, H909  
 calcium transport, ischemic heart, H380  
 Serotonin, DOCA hypertension and, coronary artery reactivity, H409  
 Shunt, right-to-left, evaluated by phase-plane method, H517  
 Sinoatrial node, excision, subsidiary atrial pacemaker stabilization and, H523  
 Skin, lymph and interstitial fluid, protein concentration in, tail, H74  
 Sleep state, rhythmic variations, R-R interval, H67  
 Smoking, exposure effects, arterial blood pressure regulation and, H556  
 Sodium  
 hypertension and, renal, H797  
 transport, blood pressure and, adrenalectomy, H902  
 Sodium-calcium exchange, sarcolemmal enzymes and, hypoxia, ischemia, and reperfusion, H237  
 Sodium channels, cardiac, maximum upstroke velocity (guinea pig), H645  
 Sodium chloride, intraventricular hypertonic, cardiovascular response due to, H422  
 Sodium ions  
 intracellular, calcium paradox and, heart, H874  
 protein absorption and, red blood cell surface, H748  
 Sodium-potassium-ATPase  
 activity, corticosterone and triiodothyronine control of, myocardial, H570  
 cardiac sarcolemmal, palmitoyl carnitine and lysophosphatidylcholine effects, H840  
 sarcolemmal enzymes and, hypoxia, ischemia, and reperfusion, H237  
 Sodium pump: *see* Pump  
 Sonomicrometry, dimension transducer, cardiac, H857  
 Spectroscopy, reflectance, mitochondrial membrane potential, heart, H508  
 Staircase phenomenon, force-interval relations, heart ventricles, awake state, H616  
 Stenosis  
 coronary  
 $\beta$ -blockade effects, exercise, H52  
 ischemia, awake state, H727  
 renal artery, central action of angiotensin, H349  
 Stomach, cardiovascular reflexes, chemically induced, H459  
 Streptozotocin  
 diabetes  
 cardiomyopathy, insulin dosage effects, H817  
 heart, reduced transcoronary exchange and prostaglandin synthesis, H563

Stress  
 arteriolar wall, H687  
 longitudinal, carotid artery, H124  
 Sucrose, cerebrovascular transport, brain perfusion technique, H484  
 Superoxide dismutase, electrical stimulation, free radicals, H709  
 Swimming: *see* Exercise  
 Sympathectomy, chemical, spontaneous hypertension response to, H109  
 Sympathetic influences, subsidiary atrial pacemaker stabilization, H523  
 Sympathetic nerve fiber, postganglionic, pumping activity, lymphatic (cattle), H610  
 Sympathetic nerves  
 activity, salt-dependent hypertension, H119  
 cerebral blood flow and, during hypoxia, awake state, H446  
 Sympathetic nervous system  
 angiotensin action, renal hypertension and, H349  
 dysfunction, insulin treatment and, juvenile alloxan-induced diabetes, H132  
 hypertension, after captopril administration, H946  
 neurohormones, sodium chloride and, H422  
 sodium effects, renal hypertension, H797  
 Sympathetic stimulation, cerebral vasoconstrictor responses, nimodipine and, H170  
 Systolic wall, thickening, ischemia, awake state, H727

## T

Tachycardia, circus-movement, atrium (frog), H185  
 Tail artery, free radicals, electrical stimulation, H709  
 Temperature  
 dependence, isotonic length transient, heart muscle, H548  
 myocardial, H295  
 Tension clamp, papillary muscle mechanics, H548  
 Tetrodotoxin  
 cycle length-dependent action potential, cardiac Purkinje fibers, H936  
 relaxatory response, saphenous vein, H952  
 Theophylline, contraction-induced vasodilation and, arterioles, H195  
 Thermodilution, chronic tobacco smoke exposure, arterial blood pressure regulation, H556  
 Thermoregulation, interstitial fluid pressure, hemodynamics and, tail, H80  
 Thoracic aorta, damaged, filtration through, H784  
 Thrombin, endothelium and asymmetrical responses, coronary arterial wall, H403  
 Thyroidadrenalectomy, sodium-potassium-ATPase activity and, myocardium, H570  
 Thyroid hormone, nutritional modification, cardiac, weanling, H967  
 Tissue, ultrasonic characterization, myocardial ischemia, H478  
 Tobacco smoke, chronic exposure, arterial blood pressure and, H556  
 Training: *see* Exercise  
 Transcoronary exchange, reduced, diabetic heart, H563  
 Transducer, hermetically sealed, cardiac, H857  
 Transfusion, fetal-maternal exchange, effects on fetal oxygenation and blood flow (sheep), H655  
 Triiodothyronine, sodium-potassium-ATPase activity and, myocardial, H570

## U

Ultrasound, quantitative, myocardial contraction before and after ischemia, H478  
 Urea, cerebrovascular transport, brain perfusion technique, H484  
 Uremia, hemodynamic response, volume depletion, H229

## V

Vagal afferents, salt-dependent hypertension, cardiopulmonary baroreflexes in, H119  
 Vasoconstriction  
 cerebral, nimodipine and, H170  
 hemodynamic response, uremia, H229  
 morphology, arteriolar wall, H687  
 Vasodilation  
 cerebral arterioles, 15-hydroperoxy-eicosatetraenoic acid effects, H631  
 contraction-induced, reduction by adenosine deaminase or theophylline, arterioles (hamster), H195  
 coronary, adenosine and, H869  
 hypoxic pulmonary, adenosine and (ferret), H541  
 renal, amino acid-induced, H999  
 Vasodilators  
 DOCA hypertension, coronary artery reactivity, H409  
 myocardial adenosine, active hyperemia and, H804  
 Vasopressin: *see also* Antidiuretic hormone  
 arginine, pressor responsiveness to, pregnancy, H100  
 cardiovascular response, intraventricular hypertonic sodium chloride, H422  
 cigarette smoking and, cutaneous blood flow, H895  
 microinjection, locus coeruleus, awake state, H675  
 plasma arginine, baroreflex control of, H638  
 pressor action and, norepinephrine and angiotensin, H973  
 Vasopressin antagonist, vascular, cutaneous blood flow and, H895  
 Ventricular fibers, automaticity, barium concentration and, H429  
 Verapamil, myocardial binding and, H775  
 Volume  
 depletion, hemodynamic response, uremia, H229  
 end-diastolic, developmental changes, fetal and postnatal (sheep), H371  
 Volume expansion, renal denervation and (monkey), H960

## W

Water, cell, adrenalectomy effects, H902



# Author Index to Volume 16

- Abboud, F. M., H824, H833  
 Abert, S. J., H857  
 Adeagbo, A. S. O., H17  
 Allen, P., H146  
 Althaus, J. S., H341  
 Altieri, R. J., H682  
 Anderson, P. A. W., H371  
 Arts, T., H264  
 Atarashi, H., H936  
 Aukland, K., H74, H80  
 Azuma, T., H610
- Bache, R. J., H452  
 Bahinski, A., H146  
 Ball, N. A., H797  
 Barry, C. R., H973  
 Barry, W. H., H322, H669  
 Bartolomei, M. S., H570  
 Barzilai, B., H478  
 Bashour, F. A., H869  
 Bennett, C. H., H556  
 Berecek, K. H., H675  
 Berne, R. M., H804  
 Bernstein, D. R., H754  
 Bhattacharyya, M. L., H273  
 Bkaily, G., H1018  
 Blackmon, J. R., H251  
 Boder, G. B., H157  
 Bowling, N., H157  
 Brady, J., H775  
 Brezis, M., H999  
 Brody, M. J., H139, H349, H1005  
 Brunner, H. R., H895  
 Bryan, W. J., H991  
 Brynjolfsson, G., H523  
 Buja, L. M., H775  
 Burt, J. M., H880  
 Bush, L., H775  
 Busija, D. W., H446  
 Busnardo, L., H576  
 Busselen, P., H874  
 Bussien, J.-P., H895
- Caillet, D., H616  
 Canfield, T. R., H124  
 Carey, R. M., H341  
 Ceschi, J., H1013  
 Chapman, R. A., H874  
 Chase, N. L., H960  
 Chen, H. L., H715  
 Chen, W.-T., H229  
 Chien, S., H361  
 Chilian, W. M., H984  
 Chimoskey, J. E., H218  
 Chou, C. C., H395  
 Christman, C. W., H631  
 Churchill, P. C., H343  
 Clarkson, C. W., H645  
 Cocceani, F., H17  
 Cohen, R. A., H403  
 Cooper, G., IV, H146  
 Coraboeuf, E., H429  
 Corr, P. B., H661  
 Cosin, J., H283  
 Coulombe, A., H429  
 Coumans, W. A., H264  
 Couper, G. S., H760, H916
- Creekmore, J. S., H946  
 Crenshaw, C., Jr., H371  
 Crozatier, B., H616  
 Crystal, G. J., H869  
 Cutz, E., H17
- Dai, X.-Z., H452  
 dal Ri, H., H1010  
 Daly, M. J., H237  
 Daugirdas, J. T., H229  
 Davis, J. O., H61  
 Davis, J. W., H857  
 Davis, L. D., H312  
 DeForrest, J. M., H946  
 De Gaetano, G., H440  
 DeGrado, T. R., H754  
 DeWitt, D. F., H330  
 DiBona, D. R., H467  
 Doane, J., H1018  
 Dobrin, P. B., H124  
 Dowell, R. T., H967  
 Downey, H. F., H869  
 Duling, B. R., H687  
 Dzielak, D. J., H722
- Ebert, T. J., H1013  
 Edell, D. J., H669  
 Edwards, J. G., H109  
 Ehara, T., H244  
 Elharrar, V., H936  
 Elijovich, F., H973  
 Ellis, E. F., H631  
 Ely, S. W., H804  
 Elz, J. S., H237  
 Elzinga, G., H295  
 Epstein, F. H., H999  
 Escourrou, P., H251  
 Evans, J. J., H303
- Faber, J. E., H349  
 Farley, D. B., H1005  
 Farrar, J. K., H40  
 Fastenow, C., H1005  
 Fastenow, C. F., H847  
 Fein, F. S., H817  
 Ferrari, A., H119  
 Ferrario, C. M., H422  
 Ferrone, R. A., H946  
 Fink, G. D., H991  
 Firrell, J. C., H361  
 Fleming, J. T., H88  
 Fonseca-Costa, A., H517  
 Ford, L. E., H495  
 Freeman, R. H., H61  
 Friedman, S. M., H902  
 Frohlich, E. D., H35  
 Fujii, S., H185
- Gallagher, K. P., H727  
 Gandler, T., H775  
 Garoutte, G., H61  
 Gatley, S. J., H754  
 Gidday, J. M., H804  
 Gillespie, M. N., H682  
 Gilmour, R. F., Jr., H303  
 Gimeno, J. V., H283  
 Glick, K. L., H371  
 Glower, D. D., H857
- Goetzman, B. W., H655  
 Golin, R., H576  
 Gordon, F. J., H119  
 Goswami, T., H25  
 Gottlieb, J. E., H541  
 Gray, D. K., H960  
 Greensmith, J. E., H687  
 Griendling, K. K., H928  
 Guillem, M. I., H283
- Hacker, A. D., H682  
 Haddad, G. G., H67  
 Hagen, E. C., H409  
 Haghani, Z., H775  
 Halama, J. R., H754  
 Hamelin, M., H206  
 Hano, J. E., H229  
 Hasin, Y., H322  
 Hassinen, I. E., H508  
 Haws, C. W., H170  
 Hayes, J. J., H1013  
 Hayes, J. S., H157  
 Haywood, J. R., H797  
 Heesch, C. M., H824, H833  
 Heistad, D. D., H170  
 Hiltbrand, B., H760, H916  
 Hirano, Y., H185  
 Hirota, A., H185  
 Hofbauer, K. G., H675, H895  
 Hohl, C., H563  
 Holden, J. E., H754  
 Hondeghe, L. M., H645  
 Houser, S., H146  
 Hull, S. S., Jr., H218
- Ing, T. S., H229  
 Israel, D. A., H669  
 Itskovitz, J., H655  
 Izzo, J. L., Jr., H229
- Jarmakani, J. M., H177  
 Jeng, H. J., H67  
 Johnson, A. K., H139  
 Jones, J. L., H792  
 Jones, R. E., H792  
 Jones, R. S. G., H675  
 Jones, S. B., H523  
 Joshua, I. G., H88  
 Joyner, R. W., H584, H596
- Kaiser, D. L., H341  
 Kanaide, H., H380  
 Kappagoda, T., H952  
 Kardon, M. B., H35  
 Kaseda, S., H768  
 Kauppinen, R. A., H508  
 Kawano, Y., H422  
 Kemper, W. S., H52, H727  
 Kendrick, J. E., H623  
 Kennett, F. F., H889  
 Kenny, M. A., H251  
 Khraibi, A. A., H722  
 Kikuchi, Y., H739, H748  
 Kirchberger, M., H973  
 Kitamura, K., H699  
 Klaus, W., H563  
 Klein, L. E., H570  
 Knabb, R. M., H804
- Knauer, T. E., H889  
 Knuepfer, M. M., H139  
 Kobrin, L., H35  
 Kontos, H. A., H631  
 Kotrly, K. J., H1013  
 Koyama, T., H739, H748  
 Koziol, J. A., H727  
 Krakoff, L. R., H973  
 Kramer, G. C., H74  
 Krauhs, J. M., H811  
 Kunze, D. L., H811
- Lai, T. L., H67  
 Lamb, F. S., H709  
 Lampugnani, M. G., H440  
 Langer, G. A., H880  
 Lauer, M. R., H312  
 Laughlin, D.L., H847  
 Lee, S. H., H67  
 Leimbach, W. N., Jr., H638  
 Lever, M. J., H784  
 Li, J. K.-J., H95  
 Liedtke, A. J., H387  
 Lipowsky, H. H., H361  
 Lo, C. S., H570  
 Longhurst, J. C., H459
- Mackall, C. L., H861  
 Madaras, E. I., H478  
 Magrassi, P., H517  
 Malécot, C., H429  
 Malhotra, A., H817  
 Manring, A., H371  
 Marcus, M. L., H847, H984  
 Mark, A. L., H119, H638  
 Mark, R. G., H669  
 Maron, M. B., H1  
 Martin, A. F., H967  
 Martin, G., H283  
 Mashima, H., H699  
 Matsubara, T., H645  
 Matsuzaki, M., H52, H727  
 Matthes, R. D., H109  
 Maughan, W. L., H978  
 McBride, W., H775  
 McIndoe, R. A., H902  
 Melbin, J., H95  
 Meno, H., H380  
 Mezaros, L., H146  
 Miller, E. D., H341  
 Miller, J. G., H478  
 Miller, M., H52  
 Miller-Green, B., H817  
 Milnor, W. R., H928  
 Mitsuiye, T., H244  
 Mjøs, O. D., H387  
 Mueller, S. M., H132  
 Mukherjee, A., H775  
 Murray, R. D., H343  
 Myhre, E. S. P., H531
- Nakamura, M., H380, H768  
 Nakanishi, T., H177  
 Nathan, R. D., H273  
 Nayler, W. G., H237  
 Nellis, S. H., H387  
 Ng, C. K., H754  
 Nishioka, K., H177

Noordergraaf, A., H95  
 Norman, R. A., Jr., H722  
 Norusis, M. J., H229  
 Nussberger, J., H895  
 Nwasokwa, O., H8

O'Brodovitch, H., H341  
 O'Connor, W. N., H146  
 Ogata, I., H768  
 Ohhashi, T., H610  
 Oigman, W., H35  
 Okada, M., H380  
 Okada, T., H699  
 Okhuysen, C. H., H840  
 Okuyama, H., H699  
 Olley, P. M., H17  
 Olpe, H. R., H675  
 Olsen, C. O., H857  
 Olson, J. W., H682  
 Oppliger, R. A., H109  
 Ordway, G. A., H459  
 Orlea, C. J., H811  
 Overholt, E. D., H584, H596  
 Overton, J. M., H109  
 Owens, K., H889

Pagani, E. D., H909  
 Paller, M. S., H100  
 Pande, S. V., H25  
 Paradise, N. F., H861  
 Parvin, R., H25  
 Patriitti, J., H52  
 Peake, M. D., H541  
 Pegram, B. L., H35  
 Pérez, J. E., H478  
 Peterson, T. V., H960  
 Piene, H., H531  
 Pilati, C. F., H1  
 Pisarri, T. E., H623  
 Pitts, B. J. R., H840

Povlishock, J. T., H631  
 Powell, W. J., Jr., H467  
 Powers, E. R., H467  
 Prinzen, F. W., H264  
 Proctor, K. G., H195

Ramza, B., H596  
 Randall, W. C., H523  
 Rankin, J. S., H857  
 Rapoport, S. I., H484  
 Rawling, D., H584  
 Reinauer, H., H563  
 Reneman, R. S., H264  
 Renkin, E. M., H74  
 Rich, T. L., H880  
 Richardson, D. R., H556  
 Rimele, T. J., H259  
 Rinkema, L. E., H523  
 Rodrigo, G. C., H874  
 Roemen, T. H. M., H264  
 Roman, C., H655  
 Romêo, L. J. M., Jr., H517  
 Rooke, T. W., H259  
 Rose, C. E., Jr., H341  
 Rosen, P., H563  
 Rosen, R., H563  
 Ross, J., Jr., H52, H727  
 Rowell, L. B., H251  
 Rubio, R., H804  
 Rudolph, A. M., H655  
 Rumberger, J. A., H847  
 Rusy, B. F., H312

Saeki, Y., H548  
 Sagawa, K., H8, H978  
 Sammler, J., H1010  
 Sastre, A., H928  
 Sato, H., H699  
 Sawanobori, T., H185  
 Schaller, M.-D., H895

Scheuer, J., H817  
 Schmid, P. G., H638  
 Schmidt, G., H1010  
 Schneeberger, E. E., H206  
 Senaratne, M., H952  
 Shepherd, J. T., H403  
 Shibata, T., H548  
 Shine, K. L., H760, H916  
 Silva, P., H999  
 Sit, S. P., H395  
 Smith, J. J., H1013  
 Smith, Q. R., H484  
 Sobel, B. E., H478  
 Solaro, R. J., H909  
 Sonnenblick, E. H., H817  
 Spann, J. F., H146  
 Sparks, H. V., Jr., H330  
 Sperelakis, N., H337, H1018  
 Spratt, J. A., H857  
 Stebbins, C. L., H459  
 Stella, A., H576  
 Sterba, J. A., H523  
 Streter, F., H146  
 Sturek, M. S., H109  
 Suga, H., H8  
 Sunagawa, K., H978  
 Surawicz, B., H936  
 Surmitis, J. M., H861  
 Sweet, W. D., H61  
 Sylvester, J. T., H541

Tajimi, T., H52  
 Takasato, Y., H484  
 Tanaka, M., H902  
 Tedgui, A., H784  
 Ten Velden, G. H. M., H295  
 Thames, M. D., H824, H833  
 Tipton, C. M., H109  
 Tomoike, H., H768  
 Tse, W. W., H415

Tunstall, J., H874  
 Tuor, U. L., H40  
 Tyson, G. S., H857

Usami, S., H361

Van Brederode, J., H1013  
 Van der Vusse, G. J., H264  
 Vanhoutte, P. M., H259, H403  
 Van Orden, D. E., H1005  
 Veenstra, R. D., H584, H596  
 Vestal, R. E., H229  
 Vetterlein, F., H1010  
 Villarreal, D., H61

Waeber, B., H895  
 Wahler, G. M., H337  
 Wang, D. J., H715  
 Wangler, R. D., H330  
 Webb, R. C., H409, H709  
 Weglicki, W. B., H889  
 Wei, E. P., H631  
 Weiss, J., H760, H916  
 Werber, A. H., H991  
 Westerhof, N., H295  
 Wheeler-Clark, E., H775  
 Wiedmann, R., H584  
 Wiig, H., H80  
 Willerson, J. T., H775  
 Williams, S. F. D., H797  
 Wisenbaugh, T., H146  
 Witkowski, F. X., H661

Yanagisawa, K., H548  
 Yates, R. J., H874

Zanchetti, A., H576  
 Zin, W. A., H517  
 Zipes, D. P., H303

